

Sféra S^2

$$g = r_0^2 (d\vartheta^2 + \sin^2 \vartheta d\varphi^2)$$

① Levi-Civita tensor

$$\epsilon = ?$$

② $L_{\frac{\partial}{\partial \vartheta}} \epsilon = ?$

$$L_{\frac{\partial}{\partial \varphi}} \epsilon = ?$$

③ najděte $f(\vartheta)$ takové, aby

$$L_{f \frac{\partial}{\partial \vartheta}} \epsilon = 0$$

$$f = ?$$

spočítejte

$$L_{f \frac{\partial}{\partial \vartheta}} g = ?$$